# YAMAHA



# INTRODUCTION

Thank you for choosing the Yamaha KX5 Remote Keyboard. The KX5 has been developed using the newest and most sophisticated Yamaha digital keyboard technology. It connects to electronic keyboard instruments which have the MIDI connectors, such as the Yamaha DX series synthesizers, permitting remote stand-up performance of the keyboard instruments. The KX5 offers full initial and after touch sensitivity, permitting subtle control of timbre or dynamics via key touch. The KX5 also offers 2-octave transpose control, direct access to up to 64 voices residing in the keyboard's internal voice memory, and easy-to-use modulation and volume thumbwheels.

The KX5 vastly enhances the live-performance capabilities of keyboard instruments.

In order to obtain maximum performance from your KX5 Remote Keyboard, we urge you to read this owner's manual thoroughly.

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# CAUTION

# Turn power to the receiving keyboard ON first, then turn ON the KX5!

The KX5 outputs initial data describing the state of its controls as soon as its power is switched ON.

The receiving keyboard must therefore be turned ON before the KX5 in order to receive and process this initial data. If the receiving keyboard is turned ON after the KX5, it may not respond properly to control signals received from the KX5. For example, it may not be possible to use the portamento effect even though portamento is turned ON at the KX5. (In this case, press the portamento switch again, and it will function properly.)

To avoid such problems, always follow the following procedure.

- 1. Connect the KX5 to the receiving keyboard using the MIDI cable.
- 2. Turn the receiving keyboard ON.
- 3. Turn the KX5 ON.

#### LOCATION

Avoid placing your keyboard in direct sunlight or close to a source of heat. It is also important to avoid locations in which the instrument is likely to be subjected to vibration, excessive dust, cold or moisture.

#### HANDLING

Avoid applying excessive force to the instrument's knobs and switches.

#### CLEANING

Do not use solvents such as benzine or thinner to clean your keyboard as these may cause discoloration or staining of the instrument's exterior. Use a soft, dry cloth.

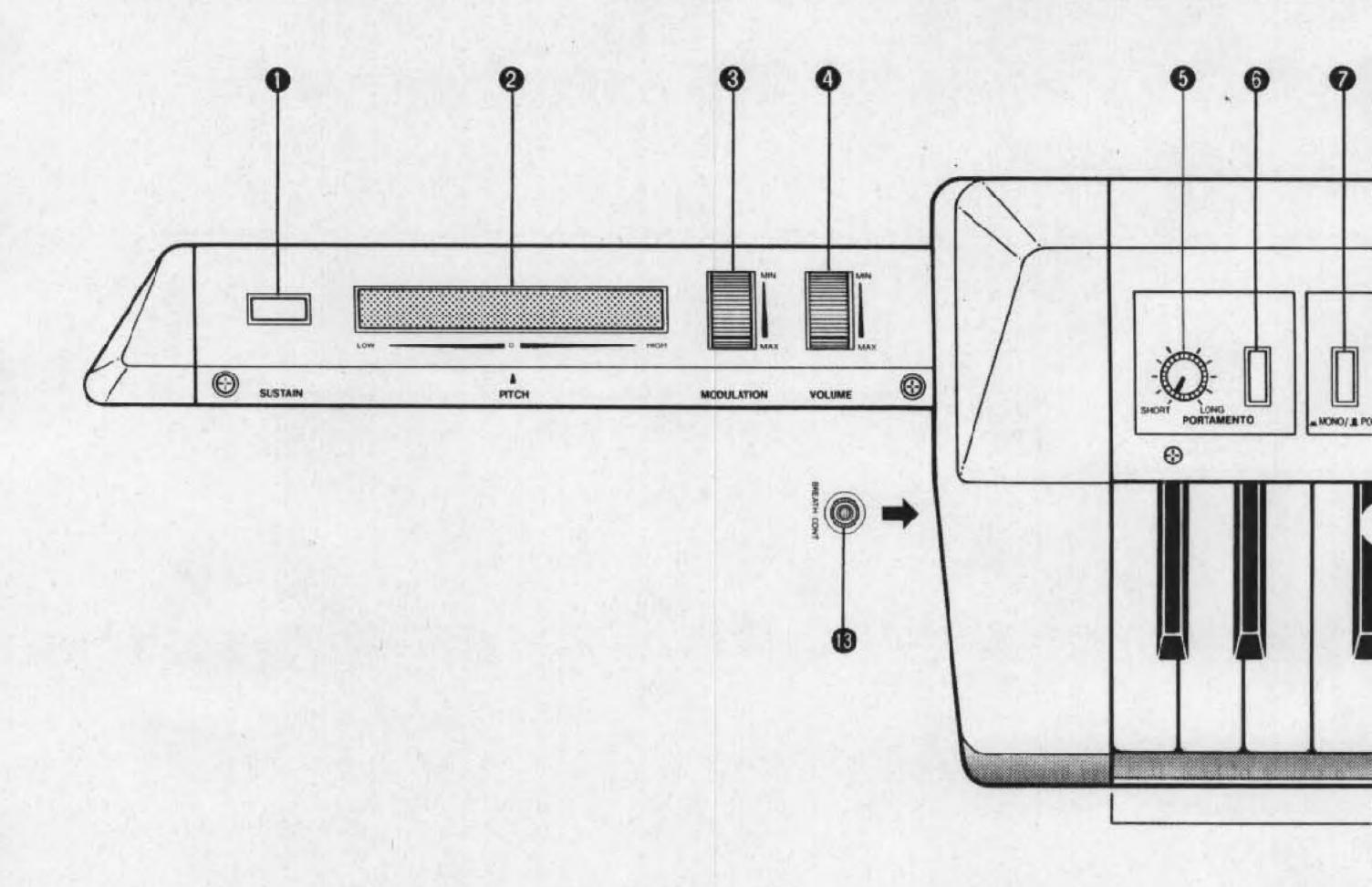
#### KEEP THIS MANUAL

After studying this manual thoroughly, it should be stored in a safe place for future reference.

#### OTHER APPLIANCES

Use your keyboard where its digital circuitry cannot be influenced by electromagnetic radiation from appliances such as televisions, radios, etc.

# PANEL OPERATION



#### **O** SUSTAIN

The sustain effect is applied while this switch is held.

# @ PITCH BEND

This ribbon controller permits smooth pitch bend effects. Pressing the ribbon controller at any position creates a corresponding variation in pitch, within the range determined by the receiving keyboard.

# **6** MODULATION WHEEL

Varies the depth of the modulation effect. The actual modulation effect varied is determined by the receiving keyboard settings.

#### VOLUME WHEEL

Adjusts the overall volume of the sound. (\*The VOLUME wheel will not function with the DX9 synthesizer.)

# **6** PORTAMENTO

By rolling this wheel, the length of the portamento effect can be adjusted. Rolling the wheel towards "LONG" increases the portamento time.

# **6** PORTAMENTO SWITCH

Turns the portamento effect ON or OFF.

# MONO/POLY SWITCH

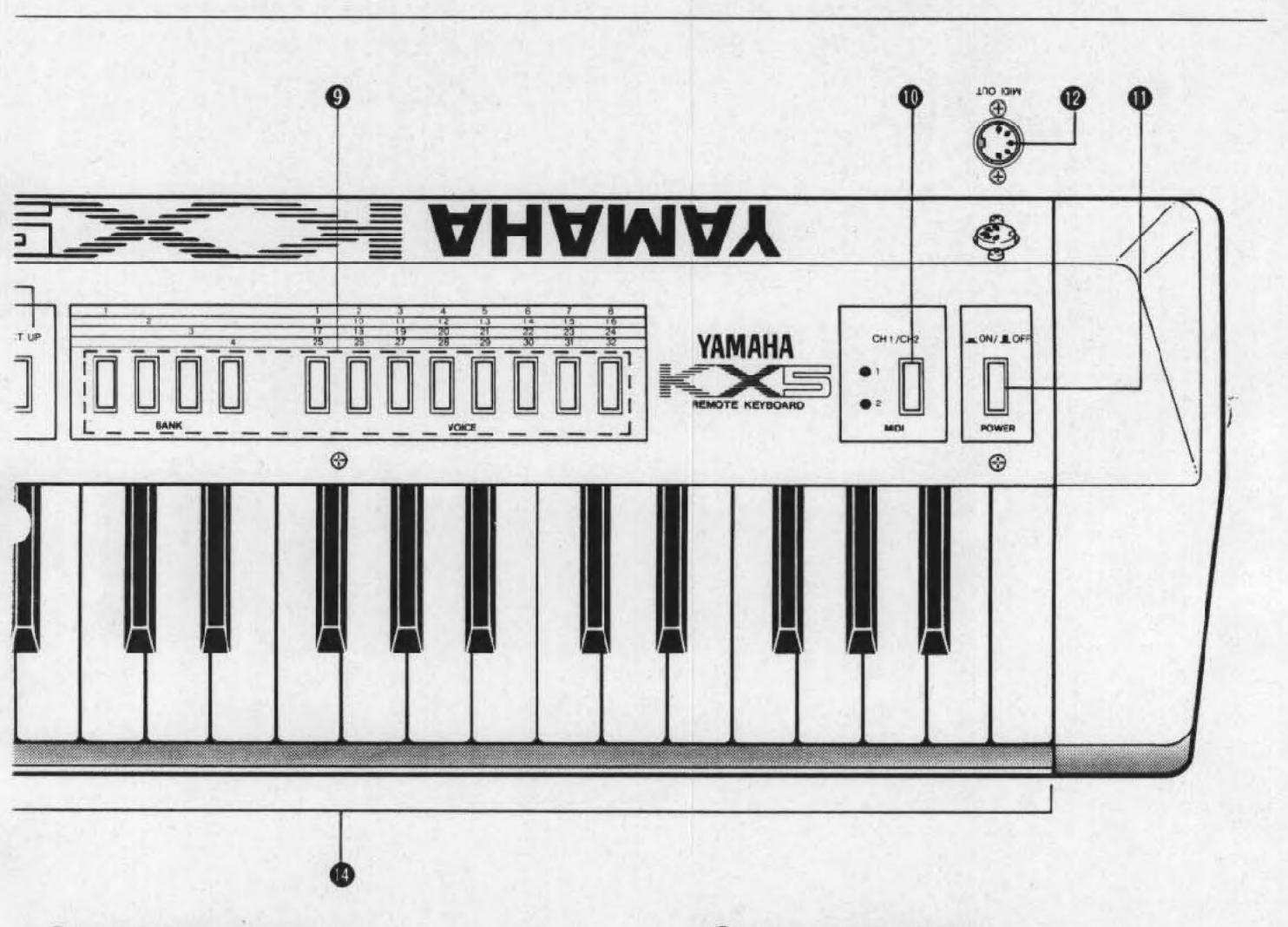
By putting the switch in the "MONO" position, the keyboard is set in the monophonic mode. Turn it to "POLY" to select the polyphonic mode.

#### TRANSPOSE SELECTORS

These selectors permit lowering or raising the pitch of the entire keyboard by 1 octave with respect to "normal" pitch.

## BANK & VOICE SELECTORS

These buttons permit selection of voices. Selection is carried out in 4 BANKs of 8 VOICEs. Also, when pressing a BANK or VOICE button while the SUSTAIN is held in, the preset voices from 33 to 64, which are not indicated on the keyboard's panel display, can be selected if those additional voices are available with the receiving keyboard.



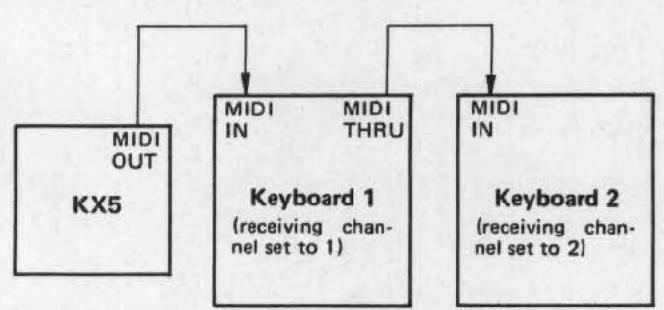
#### MIDI CHANNEL SWITCH

This switch is for setting the output channel.

The selected channel's indicator lights. Please match the channel number with the main keyboard being used.

However, the channel is not changed when the keyboard or switches are held in. The diagram (below) shows the operation of the KX5's MIDI Channel Switches when two keyboards are connected.

The receiving keyboard can be selected.



#### **POWER SWITCH**

Turn the KX5 power switch ON only after properly connecting the KX5 to your keyboard using the MIDI cable supplied. The indicator lights to show that power is being supplied.

#### MIDI OUT TERMINAL

Connects to the MIDI IN terminal on your keyboard used via the supplied midi cable. Voice and performance data are output to the keyboard via this terminal.

## **B** BREATH CONTROL JACK

An optional BC1 Breath Controller can be plugged into this jack permitting breath control of modulation effects.

# **⚠** KEYBOARD

This is a 37-key keyboard covering a range from C2 to C5. The keyboard offers full initial and after-touch sensitivity, permitting subtle control of timbre or dynamics via key touch.

NOTE 1: When the DX7 is used for receiving data from the KX5, the KX5 after-touch control is sometimes not operative, even though that for the DX7 is operative. In such a case, turn the KX5 power switch ON while holding the KX5 SUSTAIN switch in.

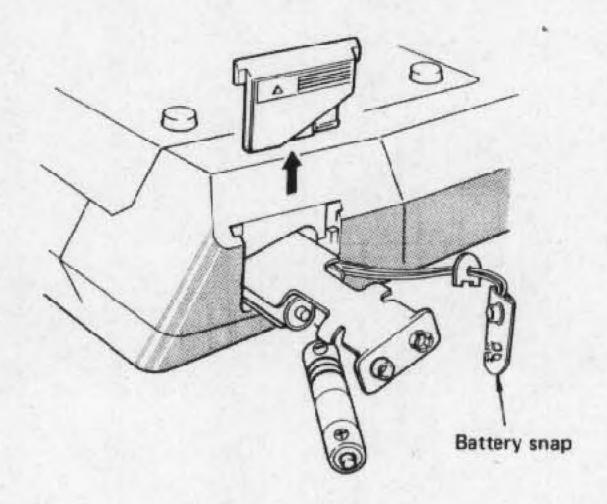
NOTE 2: Some of the controls on this model will not work with all synthesizers. Even with the Yamaha DX series, for example, the volume control will function with the DX7, but not with the DX9.

# BATTERY REPLACEMENT & STRAP CONNECTION

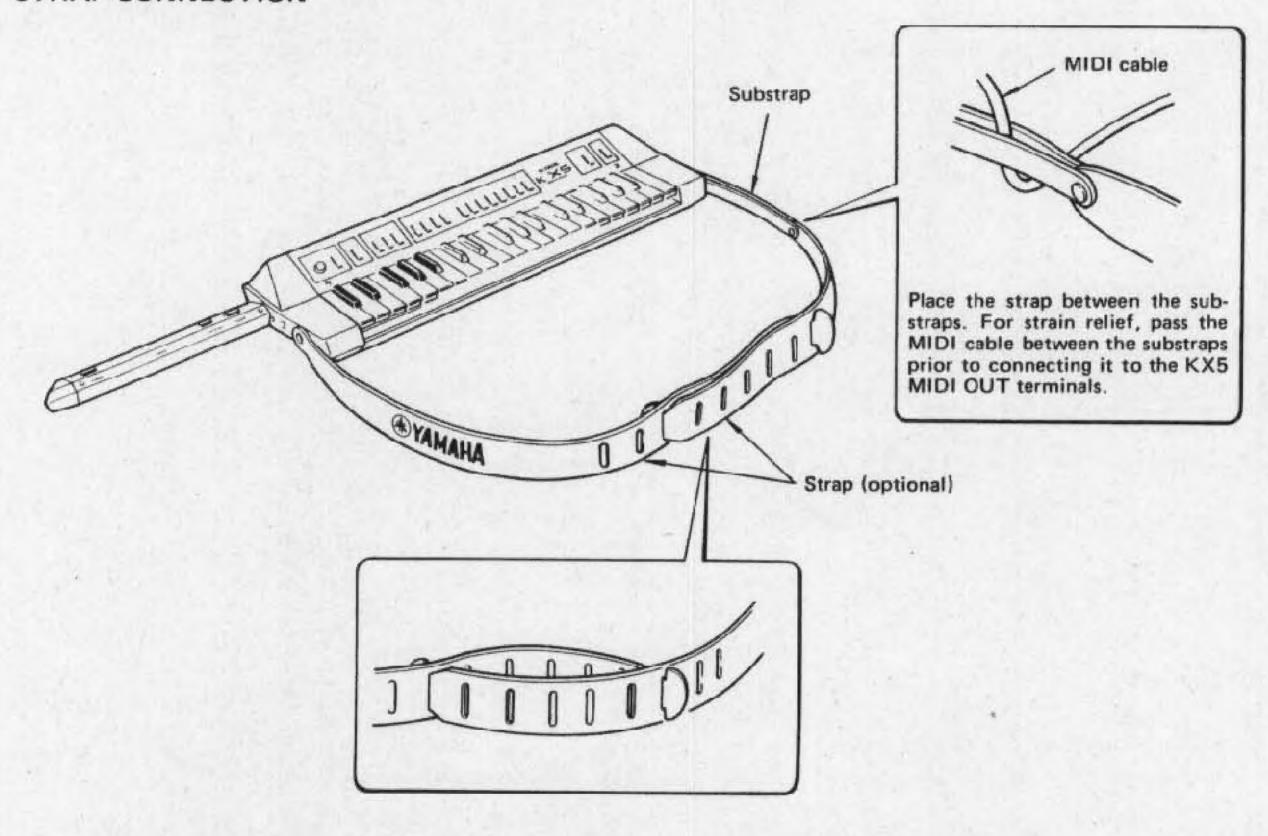
# BATTERY REPLACEMENT

The KX5 has a battery voltage monitor system built in. When the battery voltage drops below a usable value, the MIDI Channel Indicator begins to flash. When this happens, be sure to replace all the batteries at the same time.

- 1 Slide the battery cover in the direction of the arrow.
- 2 Remove the battery holder from the snap connector and replace the six "AA" or R6 batteries, carefully observing battery polarity.
- Battery life is approximately 7 hours in continuous operation.
- Remove the batteries from the KX5 if it will not be used for an extended period of time.



# STRAP CONNECTION



 Make sure that the shoulder strap is firmly attached to the KX5 before performence.

# **SPECIFICATIONS**

KEYBOARDS
TONE SELECTORS
CONTROL SWITCHES
RIBBON CONTROLLER
VOLUME PORTAMENTO TIME
WHEELS MODULATION, VOLUME
CONNECTING TERMINALS
CONTROL TERMINAL BREATH CONTROL
POWER SOURCE
LIFE OF BATTERY
COLOR Silver, Black
DIMENSIONS
WEIGHT
ACCESSORIES
OPTIONS

<sup>\*</sup> All specifications are subject to change without notice.

# FCC CERTIFICATION (USA)

While the following statements are provided to comply with FCC Regulations in the United States, the corrective measures listed are applicable worldwide.

This series of Yamaha combo Keyboards use frequencies that appear in the radio frequency range and if installed in the immediate proximity of some types of audio or video devices (within three meters), interference may occur.

This series of Yamaha Combo Keyboards has been type tested and found to comply with the specifications set for a class B computing device in accordance with those specifications listed in subpart J of part 15 of the FCC rules. These rules are designed to provide a reasonable measure of protection against such interference. However, this does not guarantee that interference will not occur. If your Combo Keyboards should be suspected of causing interference with other electronic devices, verification can be made by turning your Combo Keyboards off and on. If the interference continues when your Keyboard is off, the Keyboard is not the source of the interference. If your Keyboard does appear to be the source of the interference, you should try to correct the situation by using one or more of the following measures:

Relocate either the Keyboard or the electronic device that is being affected by the interference.

Utilize power outlets for the Combo Keyboard and the device being affected that are on different branch (circuit breaker or fuse) circuits, or install a/c line filters.

In the case of radio - T.V. interference, relocate the antenna or, if the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

If these corrective measures do not produce satisfactory results, please contact your franchised Yamaha Combo Keyboard dealer for suggestions and/or corrective measures. If you can not locate a franchised Yamaha Combo Keyboard dealer in your general area contact the Combo Service Department, Yamaha International, 6600 Orangethorpe Ave., Buena Park, CA 90620.

If for any reason, you should need additional information relating to radio or T.V. interference, you may find a booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio – T.V. Interference Problems". This booklet is available from the U.S. Government printing office, Washington D.C. 20402 – Stock #004-000-00345.

